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The Distribution and Feeding Habits
of the Golden Langur, *Presbytis geei*
Gee (Khajuria, 1956)

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(With two maps and three plates)

INTRODUCTION

As there was still a very great deal to be learnt about the distribution and habits of the recently described Golden Langur (*Presbytis geei* Gee) I decided to re-visit north-west Assam, and also for the first time the Garo Hills, for further field studies. My grateful acknowledgements are due to the Bombay Natural History Society for a financial grant (from funds made available by the Rockefeller Foundation) towards the cost of these expeditions and the field work involved.

My itinerary included the following places in Assam: north-west Goalpara District November 19th to December 1st 1959, North Kamrup District December 2nd to 15th 1959, North Kamrup District February 17th to 27th, and Garo Hills March 24th to 25th and April 20th to 29th 1960.

The history of the discovery of this new langur is briefly as follows. A number of sportsmen and Forest Officers had noticed a cream-coloured langur in the vicinity of Jamduar F.R.H. (Forest Rest House) on the east bank of the Sankosh River near the boundary of India and Bhutan. Probably the first to do so and to report it was E. O. Shebbeare in 1907, but no photographic record and no live or dead specimen was then obtained for examination.

In 'A Tentative List of the Vertebrates of the Jalpaiguri District, Bengal' Chas. M. Inglis, W. L. Travers, H. V. O'Donel, & E. O. Shebbeare (1919) make the following reference to the subject of this paper: '*Pithecus* sp?—A pale yellow coloured langur is common in the adjoining district of Goalpara (Assam). Jerdon reported one from the Terai, the adjacent district on the (west) side, which Blanford suggested might be *P. entellus*. Recently we have heard of another observed in the Terai.'

In the visitors' book of the Raimona F. R. H. (not far from Jamduar) is an entry by C. G. Baron dated 26-2-47: 'I saw some white monkeys (langurs) on the Ranga on 25th. The only other place I have seen this variety (or species) is on the Bhutan border in the North Kamrup Game Sanctuary and so far as I know they are an unidentified species. The whole body and tail is one colour—a light silvery-gold, somewhat like the hair of a blonde.' H. E. Tyndale also recorded on 23-2-48 in the Jamduar F. R. H. visitors' book that he 'saw Sankosh cream langurs'. Tyndale and another north Bengal tea planter, A. V. Pullan, both informed me personally about the existence of this cream-coloured langur at the River Sankosh, and I determined to investigate at the earliest opportunity.

Incidentally it should be mentioned at this point that there is a marked seasonal variation in the colour of this langur. The description 'cream-coloured' or 'white' is correctly applicable in the warmer weather from the end of February onwards, when they get their hot weather coats. In the colder weather from November to February they become definitely darker with a rich golden or chestnut-coloured tinge.

Accordingly I visited Jamduar on the Sankosh River from November 16th to 25th 1953. I found one troupe of these cream-coloured or golden langurs on the Bhutan side of the boundary, between Maure ('Bhutan bustee') village and the river, and another larger troupe of about 30-40 langurs about one mile (c. 1.6 km.) north of the bungalow. A third troupe was seen by my companions about four or five miles (c. 6 or 8 km.) downstream, actually on the shingle of a dried-up channel as they crossed from the main river back into the forest. The second of the above troupes was cine-filmed by me on several occasions. All three troupes were on the east bank of the river.

In August 1954 I reported the existence of these golden langurs to Dr. W. C. Osman Hill of the Zoological Society of London, and he considered that they might be a new species. Also I reported their

existence to the Zoological Survey of India in January 1955, when I showed my cine-film of them, and suggested that the Survey Party then working in Bengal should visit Jamduar in order to collect specimens for examination. Dr. S. L. Hora, then Director of the Zoological Survey of India, showed keen interest in my report, and instructed the Survey Party to include Jamduar and the cream-coloured langur in their itinerary.

The Survey Party duly collected six specimens of the langur, and H. Khajuria in his description of it as a new species was kind enough to name it after me as *Presbytis geei*, a compliment (?) which I gratefully (though very humbly) acknowledge. It was unfortunate that this new name came to be inadvertently included in a short Miscellaneous Note written by me and published in the *Journal of the Bombay Natural History Society*, Vol. 53 pp. 252-254 in December 1955, actually prior to the publication of H. Khajuria's scientific description of the langur as a new species in the *Annals & Magazine of Natural History*, Ser. 12, Vol. 9, pp. 86-88, in February 1956. Of the six specimens collected, a topotype was donated to the British Museum.

In the spring of 1957 a party known as 'The German-India Expedition 1955-1957' visited Jamduar and Raimona, and found eleven troupes of *Presbytis geei* in that neighbourhood. H. Khajuria accompanied that expedition.

In the map published with my Miscellaneous Note in 1955 I gave the Ranga stream as the eastern limit of the range of this new langur. Subsequently, however, I received information from M. A. Islam, then Divisional Forest Officer of Goalpara West Division, that he had observed a troupe of 7 or 8 of 'these golden-coloured langurs' nearly two to three miles (c. 3 to 4 km.) east of the Ranga. Islam also drew my attention to Baron's entry in the visitors' book about his having seen these langurs in the North Kamrup (Manas) Game Sanctuary, and informed me that Baron had told him personally that he had seen them on the Gabrukunda side of the river, i.e. on the west side of the Manas. This information that *P. geei* occurred as far east as the west bank of the Manas River was later confirmed by H. R. D. Robey in 1958 who saw 'troupes of the golden langur on two occasions, on the west bank of the river, whilst going upstream . ..'. Although I myself camped on the Manas River in November 1949 and again in February-March 1952, I had not observed any signs of the new langur but had only seen and filmed several troupes of a rather dark race of *Presbytis pileatus* (later identified as *P. pileatus tenebricus* Hinton, 1923) on the east bank of the river.

Two live specimens of *P. geei* were sent from Raimona to the Gauhati Zoo in Assam. One had been kept as a young one by Range Officer, Gogoi, and was seen and photographed by the German-India Expedition there in the spring of 1957. Another was caught in September 1957. Both these were in the Gauhati Zoo in 1958, but the larger one (a male) died on May 2nd 1958 and is now roughly stuffed and exhibited in the Forest Museum of that town. The younger one was photographed by me when about one year old, together with a live specimen of *P. pileatus pileatus* from Darugiri in the Garo Hills, in September 1958. It died on 25-11-58. As so little was known of the feeding habits of this langur, it is not surprising that both these specimens lived only a short time in captivity.

In addition to the known habitat of *P. geei* in the vicinity of the Sankosh and Ranga rivers, and to the reported existence of this langur on the west bank of the Manas River, there had from time to time been reports of the existence of *P. geei* in parts of the Garo Hills also, to the south of the Brahmaputra River.

NORTH-WEST ASSAM, NOVEMBER 1959 TO FEBRUARY 1960

It was against the above background that I decided to do a series of quick field surveys, in order to find out the full distribution and also the feeding habits of this new species. Accordingly I travelled to NW. Goalpara in November 1959, and spent the first day at Bamba F.R.H., which is about 18 miles (c. 28 km.) due east of Jamduar. I had with me a postcard-sized colour print of *P. geei*, and a mounted colour transparency of the same langur together with the *P. pileatus pileatus*, as photographed in the Gauhati Zoo. These I showed to the various Forest Department staff and others as I travelled around, advising all concerned of the necessity of accurate and first-hand information and so on. The news collected at Bamba was that ten to twelve troupes of *P. geei*, of about 15 langurs in each, were believed to exist in that neighbourhood (the Sanfan Forest Range), and that the Common Langur, *P. entellus*, and the Capped Langur, *P. pileatus*, did not exist in those parts. The above information was confirmed by the Range Officer of Raimona, M. N. Adhikary. I and my party did not actually observe any langurs in that area, partly owing to disturbance by labourers working on or near the forest roads.

I then moved to Jamduar, where I camped for eleven days. In this area I and my party observed from time to time six different



troupes of *P. geei*, each in number varying from 10 to 20 langurs. Young babies were seen in most troupes, apparently about 2-3 months old then, that is born about August or September. This was later confirmed by M. N. Adhikary, who stated that the second *P. geei* sent to the Gauhati Zoo was captured on September 15th 1957 and was then believed to be only one month old and in the early suckling stage.

The young ones were observed to be much lighter in colour than the adults, and this was confirmed by the Forest staff who stated that the very young babies are almost white in colour. There were several reports of 'pure white' troupes of *P. geei* having been seen but further interrogation revealed that these were seen in the hot weather, and so I do not attach any special importance to these reports. No Capped Langurs or Common Langurs were seen anywhere round here.

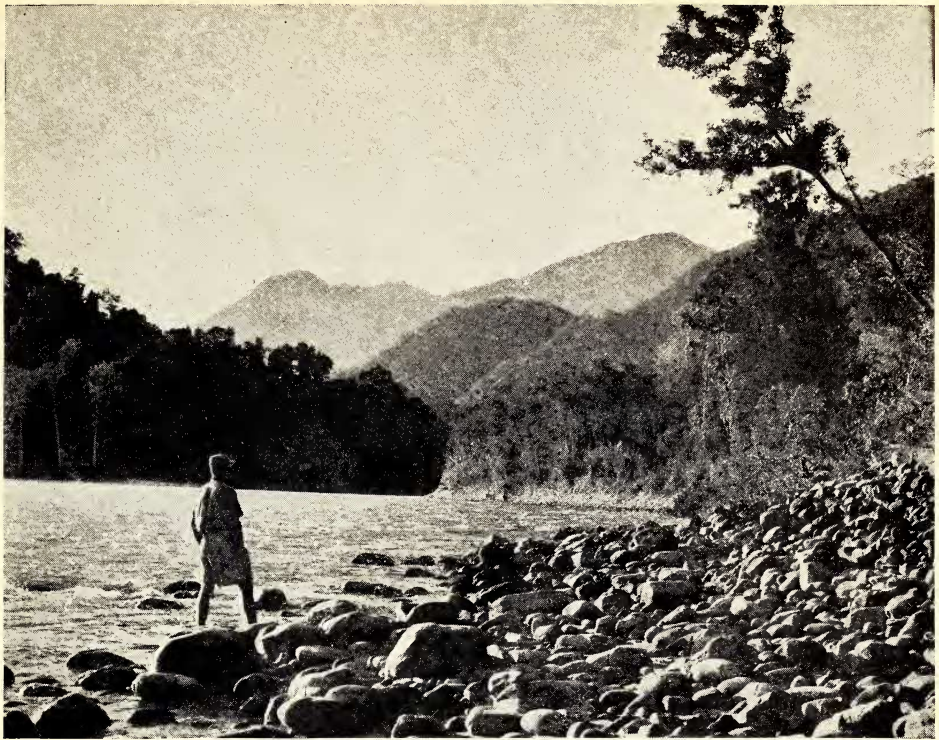
While watching one of the above troupes one mile (c. 1.6 km.) north of Jamduar, near Maure village, we saw a few rhesus monkeys *Macaca mulatta* in the rice fields feeding on the ripening corn. The village headman and others immediately confirmed that *P. geei* never descend to the ground to raid human cultivations in this manner. During our observations in November 1959 we observed *P. geei* feeding on the buds, leaves, flowers, of fruit of the following trees, of which the local (mainly Assamese) names are also given:

<i>Terminalia belerica</i>	bhomra-bohera
<i>Cedrela toona</i>	jati poma
<i>Lannea grandis</i>	jia poma
?	katakursi, katakuschi
<i>Albizia lebbek</i>	koroi
<i>Ficus</i> sp.	dumbaroo
<i>Bischofia javanica</i>	uriam
<i>Gmelina arborea</i>	gomari
<i>Oroxylum indicum</i>	bhatghila
<i>Salmalia malabarica</i>	simul

On December 2nd 1959 I moved to the Manas River and camped at Motharguri for two weeks. The local Forest staff confirmed that *P. geei* existed on the west side of the river (and not on the east side) and that *P. pileatus* existed on the east side (and not on the west side). It was not long before we ran into several troupes of *P. pileatus tenebricus* on the east side of the river. These were filmed, on several occasions, as they fed on the buds of *Salmalia malabarica* (simul).

On December 10th we looked for *P. geei* on the west side of the river, and succeeded in locating a troupe variously estimated at 20-40 langurs. They were very shy and could not be filmed, and the forest was very thick and hilly at this place on the boundary of India and Bhutan.

On February 17th 1960 I returned to the Manas to continue my field observations, and on 18th at 1.30 p.m. observed 7 *P. geei* at the



The River Sankosh as it flows out of Bhutan. This is the westernmost limit of *Presbytis geei*, a troupe of which lives in the forest at the right of the photograph.



Looking westwards across the River Manas, which is the easternmost limit of *P. geei*. In the forest just across the river this langur is found.



Some of the troupe of seven *P. geei* observed eating salty earth on the bank of the Manas River, above Motharguri



Presbytis geei about one year old, in the Gauhati Zoo

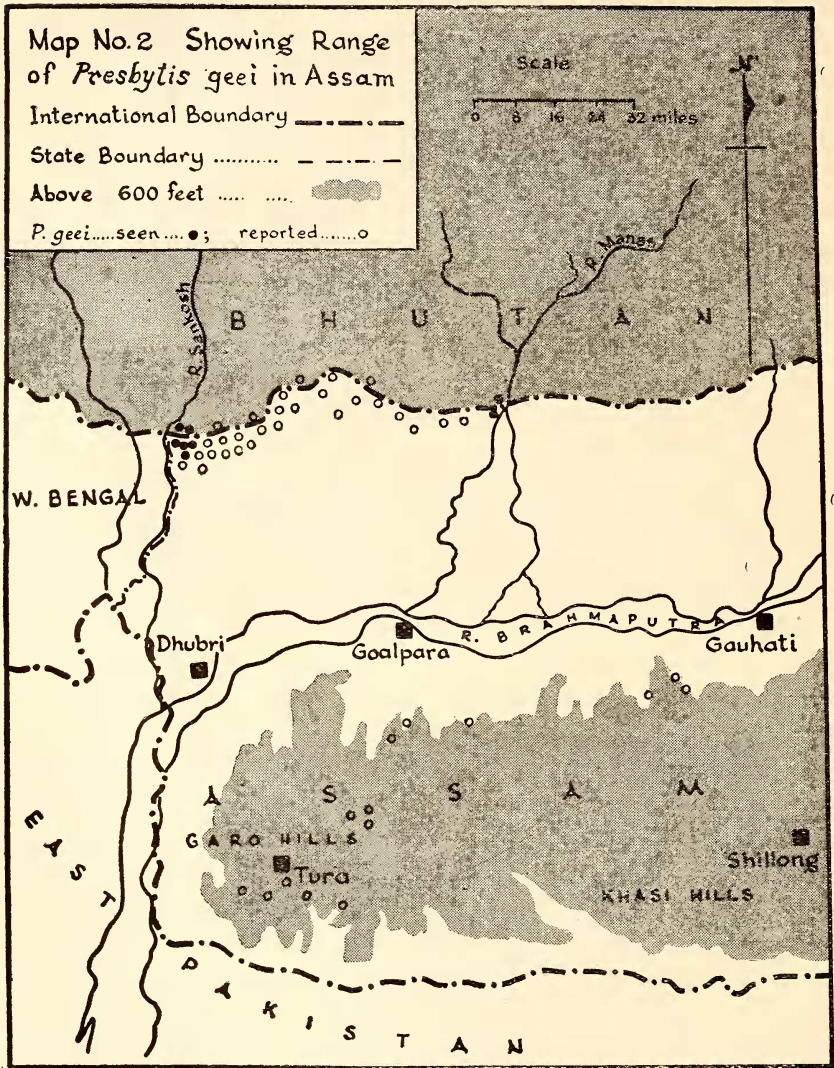
Photos : E. P. Gee

river's edge upstream from Motharguri, on the west bank, near the Bhutan border. After they had disappeared into the forest we crossed over by boat and erected my cloth 'hide' near the spot. On 20th a watch was kept in the hide from 11 a.m. to 3 p.m. but no langurs came. On 22nd the 7 langurs came from 2 to 2.30 p.m., and cine film and still photographs were obtained of them as they ate salty earth with their mouths. Only two of them drank water. They appeared to be paler in colour than the Sankosh ones, with no golden or chestnut-coloured patches. There was a mother with a lighter coloured baby among them. On 23rd they did not come, and on 24th I moved to Bhuyapara camp at the western end of the Manas Sanctuary, where we saw many troupes of *P. pileatus tenebricus*.

Other visitors to the Manas River have recently seen this small troupe of 7-9 *P. geei* on the western bank of the river, north of but not far from the Bhutan boundary, as well as the larger troupe variously estimated up to 40 langurs, which is usually south of the boundary. It is not clear whether the 7 *P. geei* seen were a separate troupe or a fragment of the larger troupe. In sketch map No. 2 I have given a conservative estimate of two troupes of 15 each seen here, and have marked them with solid dots as well as the six troupes (averaging 15 langurs each) actually seen near Jamduar on the Sankosh River. Other troupes reported to have been seen in between these two rivers, including the other five troupes seen by the German-India Expedition in 1957, have been shown as hollow dots. It is only reasonable to presume that, as the existence of *P. geei* in the areas east of the Sankosh and west of the Manas has now been proved, and as there are no geographical barriers in the way, the reports of their existence in the intervening forests should be true. It is difficult to obtain any accurate information as to how far *P. geei* extends northwards into Bhutan, but the Bhutan District Officer whom I met near Jamduar assured me that he had never heard of them further north than near Maure village, and this was confirmed later by the Maure village headman.

E. O. Shebbeare, H. E. Tyndale, and A. V. Pullan have informed me that certainly no *P. geei* have ever been observed west of the Sankosh River in north Bengal—in fact no langurs of any kind seem to be found in north Bengal until the Teesta River much further westwards.

The numbers of *P. geei* in existence in north-west Assam, between the rivers Sankosh and Manas, including the area just north of the India-Bhutan boundary, I conservatively estimate as thirty-six troupes



averaging 15 langurs in each, that is a total of 540 langurs. (See map No. 2.)

THE GARO HILLS, MARCH-APRIL 1960

On March 24th and 25th I visited Loharghat and Khulsi Forest Ranges in the Khasi Hills adjacent to the north-east portion of the Garo Hills, and showed the colour pictures of langurs to various Forest staff, contractors, and others. The consensus of opinion was

that *P. geei* existed in those parts, but none could be found in the short time available.

On April 19th and 20th I visited Boko Forest Range and Damra and Thapa, and questioned all the Forest staff I could meet. They were uncertain about the existence of *P. geei* in those actual parts, but several persons stated that they had seen this cream-coloured langur in Rengrengiri Forest and on the Tura Ridge.

While at Darugiri on April 21st to 23rd, Rongjeng and Nangalbibra were visited but no information on *P. geei* was obtained beyond what I had heard previously. A small troupe of *P. pileatus pileatus* was observed about one mile (c. 1.6 km.) from the Darugiri F.R.H., very light in colour and similar to the one photographed in the Gauhati Zoo.

On April 24th I journeyed to Songsak, Krishnai, and Goalpara town. Then on 25th to Rongsai, where a troupe of 10 *P. pileatus (tenebricus ?)* was seen, and to Haloidonga and Phulbari. The following day I went to Tura, the administrative centre of the Garo Hills, where I camped with P. C. Gogoi, the Divisional Forest Officer. Reports continued to be received of the existence of *P. geei* in the Rengrengiri Forest, which was rather inaccessible at the time owing to new road construction and impending rainy season, and on the Tura Ridge. Two trips up to the Tura Ridge proved unfruitful.

On April 28th I moved on to Singrimari, and back to Krishnai and Damra, and on 29th back to Shillong. The result of this quick expedition was disappointing in that I and my party actually did not observe any *P. geei*, but I am convinced that this species does exist (in small numbers, at least) in these Khasi Hills and Garo Hills, not so much because of the foregoing reports but for the following reasons:

1. B. Mitchell, an experienced sportsman who knows the Jamduar and Raimona area well and who has known *P. geei* there for a number of years, informs me that he was at Garupara village about 7 miles (c. 11 km.) east of Ranigodam F.R.H. in the Khasi foothills (adjacent to the Garo Hills) in March 1955, and came across a troupe of 8 or 9 *P. geei* which became very alarmed at the sight of his Labrador dog. He confirms that these langurs were exactly the same as the ones at the Sankosh River.

2. G. D. Munro, an experienced animal dealer of Calcutta, informed me in January 1956 that he had seen *P. geei* in the Rengram Forest of the Garo Hills, and that he once actually captured two of them there and sent them to the Milan Zoo, but they died on the

way. As Munro had seen the skins of *P. geei* collected by H. Khajuria, it is likely that his information is accurate.

3. In 1956 a very experienced animal catcher of Assam, Nokul Sarkar, visited me and was shown my cine film of *P. geei* (made at the Sankosh River in 1953). He instantly recognised the langur, and was quite definite that he had personally seen it in the Khulsi Forest Range and in near-by parts of the Garo Hills.

In maps No. 1 and 2, therefore, I have shown fourteen troupes averaging 15 langurs each of *P. geei* as 'reported' in the Garo Hills and a portion of the Khasi Hills. It is hoped that in the not far distant future I may be able to obtain more definite evidence as to the existence of this new species in these hills south of the Brahmaputra.

NEED FOR MORE INFORMATION

Throughout my trips to NW. Assam and into the Khasi Hills and Garo Hills I was severely handicapped by the fact that the local people, including the subordinate members of the Forest Department staff, possessed very little knowledge of natural history in general and of langurs in particular. Added to this, the local ideas of colour differences and the local words used to express colours, are very vague indeed. Consequently it was extremely difficult to explain in any language the difference between the Common Langur, *P. entellus*, the Capped Langur, *P. pileatus*, and the Golden Langur, *P. geei*. Moreover, in the Khasi and Garo hills there also exist Whitebrowed Gibbons or Hoolocks, *Hylobates hoolock*, the females of which are cream- or buff- coloured, and this added to the confusion.

I therefore consider it essential that in any future investigation the local people should be shown coloured pictures of all three above species of langur, and also if possible the female Hoolock, all drawn to the same scale. A colour plate accompanies this note, and I have added the details of the information wanted in the form of a questionnaire, to be published as an appendix to this note. The staff of the Forest Department can do a very great deal to assist in the collection and compilation of information, as this Department is well organized into Divisions, Ranges, Beats, and Sub-beats throughout the region concerned; and they alone are competent to identify the trees on which the langurs feed at different times of the year.